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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,970	03/19/2001	Thomas Zermani	MCA-508 US	9265

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EXAMINER
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OCAMPO, MARIANNE S

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 10/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/811,970

Applicant(s)

ZERMANI ET AL.

Examiner

Marianne S. Ocampo

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 7-19-02 of Figs. 9 and 10a-b is: a) ☒ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of Group 1 invention, involving pending claims 1 – 12 and 16 in Paper No. 4 (Amendments filed on 7-19-02) is acknowledged. Non-elected claims 17 – 23 have been canceled by Paper no. 4.

### *Specification*

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the claimed limitations “a **filter retention device within the depth of the well**” in the base claim 1, and “the filter retention device selected from the group consisting of underdrains, shelves, rims, lattice supports, undercuts and **combinations thereof**”, lack proper antecedent basis in the original specification. First of all, the so-called “filter retention device” claimed here is actually a bottom portion (4 or 23) of the well (2 or 22), which is an integrally formed perforated bottom or underdrain portion of the well, according to page 4, lines 4 – 5 and in figs. 1 and 3. Although there is support for other arrangements/embodiments for a filter retention device such as partial shelves, rims, lattice supports, undercuts, as in original claim 7 and in page 5, 3<sup>rd</sup> paragraph, lines 1 – 4, it is unclear and not mentioned in the specification how

to make the retention device to be another structure (i.e. partial shelves, rims, lattice supports, etc) other than the integrally formed bottom of the well, since only the integrally formed underdrain or perforated bottom (4 or 23) has been shown by the original drawings. What combinations are being referred to by term/limitation “combinations thereof” in claim 7.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the other arrangements or embodiments of the filter retention device, as described in the specification, page 5, 3<sup>rd</sup> paragraph, lines 3 - 4. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed limitations in claim 7 must be shown or the features are canceled from the claim. **No new matter should be entered.**

5. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

*Claim Rejections - 35 USC § 112*

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1 – 12 and 16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

a). Regarding claim 1, the limitation of a filter retention device within the depth of well, as recited in the claim, is not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Where exactly is this filter retention device being formed, at the bottom of the well or near the bottom of the well (slightly above a bottom end thereof)? Furthermore, how or what structural portions of this filter retention device perform the function of retaining the filter?

b). Claim 7 recites different arrangements or embodiments of this filter retention device but was not clearly defined nor shown by any drawings. It is also not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use such partial shelves or rims or lattice supports or combinations thereof, as filter retention devices.

c). Claims 2 – 6, 8 - 12 and 16 are dependent claims and they also suffer the same defects since they depend therefrom.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1 – 12 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are as follows:

a). Concerning claim 1, the claim is vague because the relative positioning of each part is unclear, i.e., lacks essential cooperative relationships. Where is the one or more pieces of filter with respect to other parts, including the well? If there are more than one pieces of filter media, where is each one located with respect to each other? Where is the interlock relative to the filter media or the well?

b). Claims 2 – 12 and 16 are dependent claims and they also suffer the same defects since they depend therefrom.

10. Claims 1 – 12 and 16 are also rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a). Claim 1 recites the limitation “a filter retention device within the depth of the well”. Is this filter retention device, another structure other than a portion of the well? In other words, is the filter retention device defining the bottom portion of the well or not? What holds the filter retention device within the depth of the well, if it is not the integrally formed bottom of well? What is considered “the depth of the well”? Is it the very bottom end or slightly above the bottom end of the well? There is also insufficient antecedent basis for the term “the depth” in this claim. The claim seemed to introduce the possibility of having another structure which can retain the filter located within a depth portion of the well, which is not necessarily at the bottom end of the well.

b). Claim 11 is considered indefinite because it claims groups of chemical compounds and compositions which overlap with one another. It claims the following chemical compounds and compositions: “polyolefins, nylons, polyamides” in lines 3 – 4, as the polymeric material forming one or more pieces of the filter for the claimed filtration device. It is known in the art that “polyolefins” is a generic terms for a compilation/group of thermoplastic polymers derived from simple olefins such as polyethylene, polypropylene, polybutylenes, polyisoprene and their copolymers. The claim is deemed indefinite since it is unclear what structure or chemical compound is actually being recited or claimed here. Furthermore, the specification does not provide support for polyolefins other than those mentioned in page 5, lines 6 – 7, as the material

forming the filter. In other words, polybutylenes and polyisoprenes and their copolymers are not included/mentioned by the original specification. In addition, nylons are included in the group of polymers called polyamides. It is unclear what specific polyamides, other than nylons, are being mentioned or claimed in this claim as well. See MPEP section 2173.05 (t).

c). Claim 12 is deemed indefinite and unclear since it includes a trademark (i.e. BAREX) as one of its limitations. The scope of this claim is deemed uncertain since the trademark cannot be used properly to identify any particular material or product. See M.P.E.P. section 2173.05 (u) and *Ex Parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). Furthermore, claim 12 is deemed indefinite because it includes various chemical compounds and compositions which have not been specifically identified. For example, it claims “polyolefins” and “blends of polyolefins” and “acrylic resins” and “methacrylic resins”. What polyolefins (specific chemical compounds) are being claimed here? Methacrylic resins are also included in the groups of resins called “acrylic resins”. What specific resins are being distinguished here? See MPEP section 2173.05 (t).

d). Claims 2 – 6, 8 - 10 and 16 are dependent claims and they also suffer the same defects since they depend therefrom.

### ***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:



A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1 – 2, 7, 9 - 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Gasser et al. (US 5,913,962).

13. Concerning claim 1, Gasser et al. discloses a filtration device comprising at least one well (defined by the bowl-like (or well –like) container 1), one filter (3), a filter retention device (a lower end portion of member 6, 7, 8) within a depth of the well (1) and a mechanical interlock (specifically annular portions of 6 surrounding the upper ends of the filter 3), the well and the filter retention device (1 and 6, 8) being formed of a plastic and the interlock being one or more skives (“parts”) formed continuously from at least a portion of an inner wall of the well and wherein the interlock remains attached to and as a portion of the inner wall, as in fig. 3 and cols. 5 - 6.

14. With regards to claim 2, Gasser et al. also disclose at least a portion of the inner wall being tapered inwardly as the inner wall progresses from the top of the well (1) toward the bottom of the well (1), as in fig. 3.

15. Regarding claim 7, Gasser et al. further disclose the filter retention device (6, 8) being rims or shelves formed within the inner wall of the well (1), as in fig. 3.

16. With respect to claim 9, Gasser et al. disclose the device being made from a single molded plastic piece and the filter retention device being an integrally formed underdrain (“shelf or rim”) containing one opening (being covered or closed by the filter 3), as in fig. 3.

17. Concerning claim 10, Gasser et al. disclose the filter (3) being made from metal, as in col. 3, line 38.

*Claim Rejections - 35 USC § 103*

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 1 – 4, 7 – 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zermani (US 6,309,605B1) in view of Gasser et al. (962).

20. Regarding claim 1, Zermani discloses a filtration device comprising at least one well (12), at least one filter (27), a filter retention device (17, 20) within a depth of the well (12) and a mechanical interlock (not shown, at the vicinity of portion 24), the well and the filter retention device (12, 17) being formed of a plastic and the interlock being one or more skives ("parts" melted from a portion of well to form the seal between the filter 27 and the periphery 24 of the retention device 17) formed continuously from at least a portion of an inner wall of the well and wherein the interlock remains attached to and as a portion of the inner wall, as in figs. 3 & 7 and cols. 5 - 7. Here the examiner has considered "skives" as any part that forms a seal or bond that retains the filter formed from a portion of the inner wall of the well. Gasser et al. teach a similar filtration device as Zermani, (only single well embodiment), wherein the device comprises a well (defined by the bowl-like (or well -like) container 1), one filter (3), a filter retention device (a lower end portion of member 6, 7, 8) within a depth of the well (1) and a mechanical interlock (specifically annular portions of 6 surrounding the upper ends of the filter 3), the well and the filter retention device (1 and 6, 8) being formed of a plastic and the interlock being one or more skives ("parts") formed continuously from at least a portion of an inner wall of the well and wherein the interlock remains attached to and as a portion of the inner wall, as in fig. 3 and cols. 5 - 6. It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the device of Zermani, by adding the embodiment (formation of "skives"/melted portions along the inner wall of the well to hold down the filter 3 towards the retention wall/device 6.8) taught by Gasser et al., in order to provide an alternative sealing design for attaching the filter element within the well to the retention device, thereby providing a more stable and effective

seal which prevents movement of the filter during use, and stronger seal to prevent leakage therethrough (see col. 4 of Gasser et al.).

21. With regards to claim 2, Gasser et al. further teach at least a portion of the inner wall of the well (1) being tapered inwardly as the inner wall progresses from the top of the well (1) toward the bottom of the well (1), as in fig. 3. The tapering of the inner wall of the filtration device of Zermani as modified by Gasser et al. allows the better anchorage resistance towards a force of the fluid flowing in an axial direction of the device (see col. 4 of Gasser et al.).

22. Concerning claims 3 – 4, although Zermani as modified by Gasser et al. fail to teach the tapering of the wall being from about 0 degrees toward the vertical center line to about 20 degrees toward the center line (claim 3), and is about 7 degrees towards the vertical center line of the well, it is considered obvious to one of ordinary skill in the art at the time of the invention to modify the taper of the well, as an optimization step to achieve the optimum results. Here, the examiner considered the values of about 0 degrees taper to about 20 degrees taper or even, about 7 degrees taper of the inner wall towards the center line of the well, being optimum values of a result effective variable (i.e. “taper” of the inner wall of the well) and “The discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art, and thus a prima facie case of obviousness is established.”, according to the case law, In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In other words, the tapering of the inner

wall would depend upon the choice of the user, as well, as to achieve the best anchorage resistance to force of fluid flowing in the axial direction of the well.

23. Regarding claim 7, Zermani also discloses the filter retention device (17, 20) being an underdrain or a rim or a shelf formed within the inner wall of the well (12), as in figs. 3 and 7.

24. With regards to claim 8, Zermani discloses the retention device being an underdrain, as in cols. 3 – 5.

25. Concerning claim 9, Zermani also discloses the device being made from a single molded plastic piece and the retention device being an integrally formed underdrain containing one opening, as in fig. 3.

26. With respect to claim 10, Zermani further discloses the filter (27) being made from polymeric or glass materials, as in cols. 5 - 6.

27. Regarding claim 11, Zermani discloses the filter (27) being formed of materials claimed or recited in claim 11, as in cols. 5 – 6.

28. With regards to claim 12, Zermani also discloses the device being made of at least some of the materials recited in claim 12, as in col. 5.

29. Concerning claim 16, Zermani discloses the device having a number of wells including those having 6, 96, 384 and up to 1536 wells, as in col. 6, lines 18 – 37.

*Response to Amendments and Arguments*

30. Applicant's arguments filed with the amendments on 7-19-02 have been fully considered and they are persuasive. The prior art rejections have been withdrawn. However, new rejections under 35 USC 112, first and second paragraphs and based on newly found prior art, Zermani and Gasser et al., have been presented above.

**This action is non-final.**

*Conclusion*

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne S. Ocampo whose telephone number is (703) 305-1039. The examiner can normally be reached on Mondays to Fridays from 8:00 A.M. to 4:30 P.M..

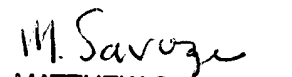
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32. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (703) 308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

33. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
M.S.O.

October 21, 2002

  
MATTHEW O. SAVAGE  
PRIMARY EXAMINER